Abstract

With the use of stacked modules, a system and method for point to point addressing of multiple integrated memory circuits is provided. A single memory expansion board is populated with stacked modules of integrated circuits. The single memory expansion board is located at the terminus of a transmission line, thus, effectively placing at a relative single point in the addressing system, added memory capacity that would otherwise have required multiple memory expansion boards and, consequently, a longer bus. Therefore, signal degradation issues are mitigated and the system has improved tolerance for higher signal speeds with added memory capacity. In a preferred embodiment, a four DIMM socket memory access bus that does not employ stacking is replaced with a single DIMM socket bus that supports stacking up to four high on a single DIMM. Although the present invention is preferably employed to advantage using stacked modules comprised from multiple CSPs, it may be employed with modules comprised from any number and type of integrated circuits including any type of packaging, whether CSP or leaded.